Statement of
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United States Department of Agriculture

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Concerning Invasive Species

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the opportunity to appear before you today. I would like to commend you for recognizing non-native invasive species as a significant threat to our nation's ecosystem health.

Populations of non-native invasive species in the U.S. are expanding annually by 7 to 14 percent. New species continue to be encountered at our national border and at individual States' borders. Invasive species can cause widespread loss of agricultural or wildland resources, thereby impacting dramatically our nation's economy and the environment. These changes in the ecosystems from non-native invasive species often result in eliminating or restricting the use of our wildlands and urban areas and increased management costs. We face a daunting challenge in managing non-native invasive species, but the Department is committed to working with the States, local governments, federal agencies, weed management entities, and the Congress to identify solutions. When discussing non-native invasive species it is important to remember this includes plants, animals, insects, and diseases.

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For over a century, non-native invasive plants have been coming into this country, and they are well established in many areas. These non-native invasive plants, invertebrates and diseases alter ecosystem functions and reduce biological diversity by eliminating native species. For example, when native plants are displaced, the water table is often lowered; soil erosion and runoff increase, and/or fire frequency and intensity multiply. Non-native invasive plants also change the plant community used by domestic livestock, wildlife, and recreationists.

The Forest Service works with a multitude of partners at the local and regional levels, and with other agencies in the Department of Agriculture (USDA) to support an integrated program of research and development, management of non-native invasive species on public land, and technical and financial assistance to private landowners. These programs are implemented through three Deputy Chief Areas, and focus on invasive insects such as the Asian longhorn beetle and Gypsy Moth, invasive pathogens such as Sudden Oak Death, newly introduced threats such as the Emerald ash borer, and invasive plants that grow after a fire such as yellow starthistle.

USDA Agencies Involved in Invasive Species Management

As Dr. Butler stated in his testimony, within USDA there are six agencies that have a leadership role in dealing with the introduction and spread of non-native invasive species and are involved in research, regulation, operations, partnerships, technical and financial assistance, and education. My remarks will focus on the Forest Service and the three Deputy Chief Areas in the Agency (National Forest System, State and Private Forestry, and Research) who work together

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and cooperatively with other Federal agencies, States, Tribes, and local organizations to develop a coordinated detection, response, and monitoring program.

Coordination and Consultation

Managing and controlling non-native invasive species takes a coordinated government approach to combine resources, develop agency needs, identify research opportunities, and streamline management actions. In 1994 the Federal Interagency Committee for Management of Noxious and Exotic Weeds (FICMNEW) was established through a Memorandum Of Understanding signed by 17 Federal Agencies (5 USDA agencies). The charge of FICMNEW is to work cooperatively to develop an ecological and integrated approach to the management of noxious and exotic weeds on Federal land and to provide technical assistance on private lands. Member agencies seek to improve the Federal government's ability to prevent, control, and manage harmful non-indigenous plant species, to maintain and restore healthy ecosystems, to preserve biological diversity on Native American and Federal lands and waters, and to provide assistance for private lands and waters. Member agencies work cooperatively to achieve FICMNEW's goals through advancement of knowledge and skills, good land stewardship practices, public awareness of noxious weed issues and management, and collaborative projects.

In 1999, Executive Order 13112 created the National Invasive Species Council (NISC), which is an inter-Departmental Council, co-chaired by the Departments of Agriculture, Commerce, and the Interior. NISC is responsible for the coordination and leadership of invasive species activities across the federal government, and ensures that Federal agencies activities are coordinated, complementary, cost-efficient, and effective. The Forest Service is a member

agency in NISC. Under Executive Order 13112, NISC appoints the Invasive Species Advisory Committee. The Advisory Committee provides information and advice for consideration by the Council, and recommends plans and actions at the local, tribal, State, regional, and ecosystem-based levels to achieve the goals and objectives of the National Invasive Species Council's Management Plan, *Meeting The Invasive Species Challenge*, completed October 2001.

Partnerships with Local Entities

Invasive plants alone cause more than \$20 billion per year in economic damage and affect millions of acres of all types of private and public lands across the United States (1998 FICMNEW report). In FY 2002, the Forest Service spent over \$50 million dollars to manage and control non-native invasive species. Funding came from the National Forest System (\$10.4 million, for invasive plants) and State and Private Forestry (\$40 million, which includes \$2.7 million for invasive plants).

The Forest Service works with States, local governments, Tribal partners, and local weed groups to control and eradicate invasive plants on public and private lands. The Agency has provided financial and technical assistance to many local weed management groups who have developed cooperative weed management areas. Various partners in the West have organized well over 100 of these areas where treatments can be planned and implemented. These local weed management groups are very effective in completing projects on the ground. The Agency is working with our partners to develop similar weed management groups in the East.

Multi-jurisdictional partnerships are important as non-native invasive plants grow across boundaries. The Forest Service can implement projects across state boundaries by combining resources from the National Forest System and State and Private Forestry Deputy Areas. In locations where a national forest is adjacent to private land, and invasive species have invaded an area, the Forest Service can allocate funding to that location in a coordinated effort that creates positive results.

An example of the necessity to implement projects across State boundaries is the 2000 fires in Idaho and Montana. As a result of the large fires in these two states, invasive plants were a threat to the area. In response, the Forest Service allocated approximately \$24.7 million to treat invasive plants on National Forest System lands and private lands (\$4.2 million in National Forest System noxious weeds funding, \$17.0 million from the National Fire Plan Restoration program, and \$3.5 million from State and Private Forestry funds). In 2001, State and Private Forestry provided an additional \$2 million dollars for noxious weed treatments on private forested lands in Idaho and Montana.

The following are examples of invasive species projects implemented on a national forest or with local weed organizations and private landowners:

- a. In Idaho, Cooperative Weed Management Areas (CWMAs) are located in all but two counties, and the Forest Service participates in CMWAs where the agency has a presence. The Salmon Challis National Forest is moving to implement a huge ground based herbicide application program to deal with the aftermath of the 2000 fires. The Forest Service Research Field Station out of Boise along with the Gooding and Camas Soil Conservation District works with "Kidnappers"; high school kids who monitor, collect and disperse biological control agents.
- b. On the Beaverhead-Deerlodge National Forest in Montana the Big Hole Weed Partnership is a public-private partnership implementing mapping, treatment,

- monitoring, and educational outreach efforts on over 1.6 million acres. Species treated include spotted knapweed, leafy spurge, and common mullein.
- c. The North Fork of Cache la Poudre Integrated Weed Management Area (NFIWMA) Project is a community-based weed cooperative effort, initiated by public and private landowners to manage noxious non-native plant species in the North Fork of the Cache la Poudre River watershed. The NFIWMA will create a regional model for implementing a community-based weed management strategy at the landscape level. The management area falls within the Laramie Foothills, a biologically rich landscape level site in northeastern Colorado.
- d. On the Cleveland National Forest in southern California the Santa Margarita and San Luis Rey Watersheds Weed Management Area was formed to organize and carry out watershed based non-native plant control to restore valuable native habitat resources. Activities include educating stakeholders, carrying out invasive non-native plant control projects, and assisting in research on the limited value of non-native plant habitat versus native habitat for birds and arthropods. Targeted invasive plants include giant reed, tall whitetop, and perennial pepperweed.

Another partnership program USDA is involved in is the multi-agency "Pulling Together Initiative" (PTI). PTI, sponsored by Federal Interagency Committee for Management of Noxious and Exotic Weeds and implemented by the Pulling Together Steering Committee, has been ongoing since 1996, and provides federal matching grants through the National Fish and Wildlife Foundation for local and regional weed prevention and control projects. Federal agencies involved include the Forest Service, the Bureau of Land Management, the Fish and Wildlife Service, the Bureau of Reclamation, the National Park Service, the Department of Defense, and the Animal Plant Health Inspection Service (APHIS). The Forest Service contributed \$300,000 to this program in FY 2001, and contributed \$400,000 in FY 2002. Many projects are already underway with this initiative, which demonstrate some of our best examples of need for coordinated weed control projects, partnerships, integrated weed management, and monitoring.

For many years the Forest Health Protection Staff in State and Private Forestry has been implementing the European Gypsy Moth and Asian Gypsy Moth programs with the States. In 2002, 1,314,365 acres were treated for Gypsy Moth. This treatment occurred on public and private lands, and was successful due to Federal, State, and Tribal partners and cooperators. The Forest Service provides funds for suppression and eradication purposes, and local entomologists and pathologists provide technical assistance to our cooperators.

The coordination and priority setting that are occurring between Federal, State, and private partners become more critical as State and Federal funds are allocated which impact multi-jurisdictional boundaries. These partnerships foster a climate of cooperation and coordination with all concerned entities, resulting in increased sharing of expertise, information, resources, experience, and applied action to improve the efficiency and effectiveness of any invasive weed management program.

Response After An Infestation

When an infestation occurs, a response is needed immediately to remove the threat or reduce the spread of the invasive species. An example is Sudden Oak Death, a newly identified forest disease caused by the pathogen *Phytophthora ramorum* that has killed thousands of tanoak and oaks in coastal areas of central California. Small infestations were recently found in southern Oregon and eradications efforts have begun. Laboratory investigations indicate that other oak species, including northern red and pin oak, are susceptible to the pathogen. Concerns regarding the risk of this disease to the Nation's oak forests have led to development of a National Sudden Oak Death Detection Survey of forests through the Agency's Forest Health Monitoring Program.

An additional challenge for the Forest Service is meeting the procedural requirements of the National Environmental Policy Act (NEPA), the Clean Water Act (CWA), the Appeals Reform Act, and other laws and regulations, which take time to meet and can delay efforts to combat invasive infestation. We are looking at ways to streamline procedural requirements to ensure that we can fulfill all of them in a timely manner. For example, NEPA's requirements can be met in an expeditious manner when NEPA's emergency procedure provisions apply.

Research and Development

USDA has found that research and technology development are often critical to successful management and controlling non-native invasive species, including efforts with State and local partners. The Forest Service conducts research on invasive insects, pathogens and plants at research units across the United States; and collaborates with the Agricultural Research Service, APHIS, and other federal and non-federal research organizations on such high priority threats as the Asian longhorned beetle, Hemlock woolly adelgid, Sudden Oak Death disease, and cheatgrass among others.

In FY 2002, \$8.8 million was allocated for the Forest Service Research and Development program of work on non-native invasive species. This investment benefits from close planning with agency and State and private partners, so that key management problems can be targeted for investigation. Agency scientists are making a difference in on-the-ground surveys and control and restoration activities. For example, agency discoveries include the only available microbial options, traps and survey technologies for gypsy moth control, which in turn made eradication of

the Asian gypsy moth possible; the ecological information that is the basis for predictive modeling at the heart of the gypsy moth "Slow the Spread" program; biological information that underpins quarantine of the pine shoot beetle; testing and guidelines for pesticides that can control termites and other destructive wood products pests; acoustical detection technology for identifying Asian longhorned beetle infested trees within a quarantine area; and discovery and testing of biological control agents for invasive weeds, such as leafy spurge and Miconia. For Sudden Oak Death, Forest Service scientists have helped to refine quarantine regulations and their findings supported an emergency eradication effort in California and Oregon led by APHIS.

Despite the success of agency scientists, the rate of new invasive species introductions into the United States is severely straining the limits of existing knowledge and increases the urgency for accelerated research and development. Emerald ash borer and an exotic bark beetle, *Xyleborus similes*, are just two new invaders discovered over the last six months that threaten economic and environmental resources. Already, the Emerald ash borer has killed over 1,000 ash trees in five counties around Detroit, Michigan. Agency scientists are accelerating their studies to meet this critical knowledge need of managers on pathogen spread and infection patterns, pathways of introduction, and options for control.

Given the ongoing impacts of these and other new invasive species, the Forest Service is working with other government agencies to identify a number of key actions that are vital for success. These actions are outlined in the National Invasive Species Management Plan: sustained support for research so that an integrated management response based on best available knowledge and technology is possible; availability of contingency funds to support accelerated

research and operations aimed at new, high threat invaders while eradication is being implemented; and investments in risk management, information systems, monitoring and modeling for setting management priorities and assessing program effectiveness. All these actions require a strong linkage with Research and Development.

In conclusion, non-native invasive species threaten forest and rangeland sustainability and ecosystem viability. Responding to the impacts of invasive species is a huge undertaking that often seems overwhelming. This literally is a "pay me now or pay me later" situation. The impacts and costs that are left for someone else to solve may only continue to grow. The Forest Service will continue to work with our partners, the States, and other government agencies to meet the challenge of improving and maintaining the health of the land. We will implement projects on the ground as needed on national forests; research new technologies and develop a more comprehensive understanding of the consequences of invasions on the ecology of the land; and provide resources to our State, Tribal, county, and local partners. As we continue to move into the 21st century, we will need a long-term strategy for managing and controlling invasive species. The Department is committed to working with our partners to achieve these goals.

This concludes my statement. I would be happy to answer any questions that you may have.